

United States Government

Department of Energy
Bonneville Power Administration

memorandum

DATE: July 1, 2003

REPLY TO
ATTN OF: KEP

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS
(DOE/EIS-0285/SA-165-Cardwell-Cowlitz)

TO: Ed Tompkins, TFO/LMT

Proposed Action: Vegetation Management for the Cardwell-Cowlitz 115kV transmission line.

Location: The project is located in the BPA Olympia Region in Cowlitz County, Washington.

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposal: BPA proposes to remove unwanted vegetation along the right-of-way, along access roads and around tower structures along the subject transmission line corridor that may impede the operation and maintenance of the identified transmission line. All work will be in accordance with the National Electrical Safety Code and BPA standards. BPA plans to conduct vegetation control with the goal of removing tall growing vegetation that is currently or will soon be a hazard to the transmission line. BPA's overall goal is to have low-growing plant communities along the rights-of-way to control the development of potentially threatening vegetation.

Analysis: Please see the attached checklist for the resources present. Applicable findings and mitigation measures are discussed below.

Planning Steps:

1. Identify facility and the vegetation management need.

Work will take place along the Cardwell-Cowlitz 115 kV transmission line between towers 1/4 and 7/9. The easement width along the line varies from 65 feet to 100 feet.

Tall growing vegetation of the types and densities listed in section 1.2 of the attached checklist are present in the ROW and will soon pose a hazard to the lines. The work involves clearing this tall growing vegetation and treatment of the associated stumps and re-sprouts with herbicides to ensure that the roots are killed. Follow-up herbicide treatment of resprouts will occur in late summer 2003 or spring of 2004.

Vegetation on access roads and around tower sites that impede the operation and maintenance of the transmission line will also be cleared and/or treated. Tall-growing vegetation will be cut and treated every 3 to 4 years.

Approximately 24 acres of cut, lop, and scatter treatment on the ROW, 2.7 cut and chip acres, and clearing around 11 structures will occur in this project.

Vegetation species that will be removed include

Douglas-fir, Red Alder, Big Leaf Maple, Western Hemlock, Willows, Blackberries, and Scotchbroom and poison oak.

Vegetation will be removed using manual or mechanical methods. Debris will be disposed of using either chip, lop and scatter, or mulch techniques. Brush and scotch broom will be chipped or mulched, while larger branches and tree trunks will be lopped. All debris will be scattered along the ROW.

2. *Identify surrounding land use and landowners/managers and any mitigation.*

The project crosses rural and pasture lands, Christmas trees farms, and residential lands. Landowners will be contacted by letter about 3 weeks prior to cutting the brush. Door to door contact will be made where it is warranted. Door hangers have been used at properties where special treatments are anticipated. Conversations with property owners on site, emails, and phone calls are all used.

3. *Identify natural resources and any mitigation.*

Section 3 of the attached checklist identifies the natural resources present in the area of the proposed work.

Water resources identified include riparian zones and wetland areas. Mitigation measures include selective cutting and herbicide use in addition to the use of buffer zones as described in Sections 3.1 and 3.2 of the attached checklist. These mitigation measures are consistent with the EIS.

No T&E species or other natural resource or cultural resource issues were identified.

4. *Determine vegetation control and debris disposal methods.*

Vegetation will be removed using manual or mechanical methods. Herbicide applications include spot, localized and foliar techniques. Debris will be disposed of using either chip, lop and scatter or mulch techniques as described in Section 5.1 of the attached checklist.

5. *Determine revegetation methods, if necessary.*

Revegetation activities are not planned for this project.

6. *Determine monitoring needs.*

The line crew will annually patrol the transmission line and the Natural Resource Specialist will periodically monitor the right-of-way for effective mitigation measures.

7. *Prepare appropriate environmental documentation.*

Findings: This Supplement Analysis finds that 1) the proposed actions are substantially consistent with the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285) and ROD, and; 2) there are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, no further NEPA documentation is required.

/s/ Elaine Stratton

Elaine Stratton

Environmental Protection Specialist

CONCUR: /s/ Thomas C. McKinney

Thomas C. McKinney

NEPA Compliance Officer

DATE: 07/02/2003

Attachment

cc:

L. Croff - KEC-4

T. McKinney – KEC-4

C. Leiter - KEP-4

J. Meyer - KEP-4

E. Stratton – KEP/PSB2

P. Key - LC-7

J. Hilliard Creecy – T-DITT2

D. Hollen - TF/DOB-1

D. Kraus - TFO/Olympia

S. Martin - TFO/Olympia

D. Swanson - TFOP/Ross

Environmental File - KEC

Official File - KEP-4 (EQ-14)

**Vegetation Management Checklist
Cardwell-Cowlitz**

1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

1.1 Describe Right-of-way.

See Handbook — [List of Right-of-way Components](#) for checkboxes and the requirements for the components [Rights-of-way](#), [Access Roads](#), [Switch Platforms](#), [Danger Trees](#), and [Microwave Beam paths](#).

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Cardwell-Cowlitz	9 Miles, 115KV	100 Feet, and 65 Feet	Cardwell Sub to 7/9

Right Of Way:

Right-of-Way – clearing in right-of-way

Transmission Structures – clearing around.

Clearing Access Roads to or ROW Rds. in the ROW

1.2 Describe the vegetation needing management.

See handbook — [List of Vegetation Types](#), [Density](#), [Noxious Weeds](#) for checkboxes and requirements.

Vegetation Types:

Douglas fir

Red Alder

Big Leaf Maple

Western Hemlock

Willows

Blackberries

Scotchbroom

Poison Oak

1.3 List measures you will take to help promote low-growing plant communities. If promoting low-growing plants is not appropriate for this project, explain why.

See Handbook — for requirements and checkboxes.

Cut stump and follow-up herbicide treatments on sprouting-type species will be carried out to ensure that the roots are killed. Vegetation that will grow tall will be selectively cut before it reaches a height or density to begin competing with low-growing species. Low-growing species are left untreated if they are not a threat to line integrity.

1.4 Describe overall management scheme/schedule.

See Handbook - [Overall Management Scheme/Schedule](#).

Initial entry – All tall growing vegetation will be cut and sprouting stumps chemically treated to prevent re-sprouting. Access roads, right-of-way roads and structure sites are to be cut and treated. A follow-up chemical treatment will begin in the late summer of 2003, or spring, 2004.

Subsequent entries – Every 3-4 years, a maintenance contract will be necessary to treat sprouts. The use of herbicides on the initial and subsequent cycles should reduce the quantity and cost of work.

Future cycles – Same as above.

2. IDENTIFY SURROUNDING LAND USE AND LANDOWNERS/MANAGERS

2.1 List the types of landowners and land uses along your corridor.

See Handbook — [Landowners/Managers/Uses](#) for requirements, and [List of Landowners/Managers/Uses](#) for a checkbox list.

Landowners/Managers/Uses:

- Rural
- Pasturelands
- Christmas Trees
- Residential

2.2 Describe method for notifying right-of-way landowners and requesting information (i.e., door hanger, letter, phone call, e-mail, and/or meeting). Develop landowner mail list, if appropriate.

See Handbook — [Methods for Notification and Requesting Information](#) for requirements.

Olympia will send letters to the property owners about 3 weeks prior to cutting the brush. Door to door contact will be made where it is warranted. Door hangers have been used at properties where special treatments are anticipated. Conversations with property owners on site, emails, and phone calls are all used.

2.3 List the specific land owner/land use measures — determined from the handbook or through your consultations with the entities — that will be applied.

See handbook — [Requirements and Guidance for Various Landowners/Uses](#) for requirements and guidance, also [Residential/Commercial](#), [Agricultural](#), [Tribal Reservations](#), [FS-managed lands](#), [BLM –managed lands](#), [Other federal lands](#), [State/ Local Lands](#).

Span		Landowner/use	Specific measures to be applied
From	To		
1/4	7/9	Rural areas, wooded areas.	Cut, Lop, Scatter tall-growing veg.
4/1	4/4	Residential Homes	Cut & chip. Spread or pile chips.
1/4	7/9	All Uses.	Clearing structures and cut, lop & scatter tall-growing veg.

2.4 Review any existing landowner agreements (e.g. tree/brush Permits or Agreements). List in table above any provisions that need to be followed and where they are located.

See handbook — [Landowner Agreements](#) for requirements.

N/A

2.5 List any known casual informal use of the right-of-way by non-owner publics. List any constraints or measure's to take due to the informal use.

See handbook — [Casual Informal Use of Right-of-way](#) for requirements.

N/A

2.6 List other potentially affected people, agencies, or tribes (that are not landowners/managers) that need to be notified or coordinated with. Describe method of notification and coordination.

See handbook — [Other Potentially Affected Publics](#) for requirements and suggestions.

Unknown.

3. IDENTIFY NATURAL RESOURCES

See Handbook — [Natural Resources](#)

3.1 List any water resources (streams, rivers, lakes, wetlands) that may be impacted by vegetation control activities. For each water body describe the control methods and requirements or mitigation measures that will be used.

See Handbook — [Water Resources](#) for requirements for working near water resources including buffer zones.

Span		Water body	T&E	Method	Herbicide	Application Technique	Buffer
From	To						
2/9+100	2/9+360	No Name Creek	No	Cut, Lop, Scatter	Garlon 3A	Cut Stump	
3/10+230	3/10+450	No Name Creek	No	Cut, Lop, Scatter only trees within 50 feet of conductor.	Garlon 3A	Cut Stump	35 Feet
4/4	4/4+721	No Name Creek	No	Cut, Lop and Scatter	Garlon 3A	Cut Stump	
5/1	7/1	Wetland PFOJ south of Cowlitz River.	No	Cut, Lop, Scatter tall-growing veg.	Garlon 3A	Cut Stump	

3.2 If planning to use herbicides, list locations of any known irrigation source, wells, or springs (landowners maybe able to provide this info if requested).

See Handbook — [Herbicide Use Near Irrigation, Wells or Springs](#) for buffers and herbicide restrictions.

N/A

3.3 List below the areas that have Threatened or Endangered Plant or Animal Species and the name of the species, and any special measures that need to be taken due to their presence. Attach any BAs, T&E maps, or letters from US Fish and Wildlife.

See Handbook — [T&E Plant or Animal Species](#) for requirements and determining presence.

N/A

3.4 List any other measures to be taken for enhancing wildlife habitat or protecting species.

See Handbook — [Protecting Other Species](#) for requirements.

N/A

3.5 List any visually sensitive areas and the measures to be taken at these areas.

See Handbook — [Visual Sensitive Areas](#) for requirements.

None

3.6 List areas with cultural resources and the measures to be taken in those areas.

See Handbook – [Cultural Resources](#) for requirements.

No known cultural sites.

3.7 List areas with steep slopes or potential erosion areas and the measure and methods to be applied in those areas.

See Handbook – [Steep/Unstable Slopes](#) for requirements.

Describe sensitivity	Method/mitigation measures
N/A	All natural vegetation that is not tall growing will be left undisturbed for erosion control. Less than 5 percent of all vegetation ground cover will be treated in this activity.

3.8 List areas of spanned canyons and the type of cutting needed.

See Handbook – [Spanned Canyons](#) for requirements.

N/A

4. DETERMINE VEGETATION CONTROL METHODS

See Handbook — [Methods](#)

4.1 List Methods that will be used in areas not previously addressed in steps above.

See Handbook — [Manual](#), [Mechanical](#), [Biological](#), and [Herbicides](#) for requirements for each of the methods.

Span		Methods, including herbicide active ingredient, trade name, application technique
From	To	
SUB	7/9	For non-sensitive areas (spans) cut stump/basal treatment with 50% Garlon 3A and 50% water. Summer foliar application on resprouts of 3% Garlon 3A and 97% water, and dye.

5. DETERMINE DEBRIS DISPOSAL AND REVEGETATION

5.1 Describe the debris disposal methods to be used and any special considerations.

See Handbook — [Debris disposal](#) for a checkbox list and requirements.

Debris Disposal:

Lop and Scatter: Branches of a LARGE tree are cut off (lopped) by ax or chainsaw, so the tree trunk lies flat on the ground. The trunks are occasionally cut in 1-to-2-m (4-to-8-ft.) lengths. The cut branches and trunks are then scattered on the ground, laid flat, and left to decompose.

Mulch: Mulching is a debris treatment that falls between chipping and lop-and-scatter. The debris is cut into 1-to-2-ft. lengths, scattered on the right-of-way and left to decompose. This method is used when terrain and conditions do not allow the use of mechanical chipping equipment.

Chipping: Stems and branches up to six inches in diameter are chipped into very fine material by a chipper machine, and either scattered or piled according to property owner requests.

5.2 List areas of reseeding or replanting (those areas not already described in steps 1, 2, or 3).

See Handbook — [Reseeding/replanting](#) for requirements.

N/A

Native grasses are present on the entire right-of-way that will seed into the areas that will have lightly disturbed soil predominately located on the right-of-way roads. BPA expects 2-3 vehicles of the brush contractor and 1 contract inspector's vehicle will be present on the site. A brush machine will mulch the structure sites and right-of-way roads where Scotch Broom and Black Berries are present.

5.3 If not using native seed/plants, describe why.

N/A

5.4 Describe timing and any follow-up that will need to take place to ensure germination/success of seeding/planting.

N/A

6. DETERMINE MONITORING NEEDS

See handbook — [Monitoring](#) for requirements.

6.1 Describe the follow-up/monitoring cycle that will be used to evaluate the effectiveness of the vegetation control methods used.

Monitoring of the effectiveness of the cutting and herbicide treatment will begin during inspection of the contract and during periodic patrols of the right-of-way by the Natural Resource Specialist, and linemen.

6.2 Describe any follow-up or monitoring needed to determine if mitigation measures were effective.

Annually patrol the transmission line by the line crew and the Natural Resource Specialist will periodically monitor the right-of-way for effective mitigation measures.

7. PREPARE APPROPRIATE ENVIRONMENTAL DOCUMENTATION

See handbook — [Prepare Appropriate Environmental Documentation](#) for requirements. . Also prepare Supplement Analysis — [Supplement Analysis](#) — for signature.

7.1 Describe any potential project impacts or project work that are different than those disclosed in the Transmission System Vegetation Management Program EIS. Describe how those differences impact natural resources and if the differences are “substantial”.

All proposed brush cutting and chemical treatment activities on this corridor is noted in the EIS.

7.2 Is there a need for additional NEPA documentation (i.e. Forest Service requirement, Record of Decision, supplemental EIS)? If so, attach.

No